

CASES
OF
CHRONIC HYDROCEPHALUS,
OR,
WATER IN THE HEAD;
WITH
OBSERVATIONS,
AND A
DETAIL OF A NEW AND SUCCESSFUL PLAN OF CURE.

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——— Si quid novisti rectius istis,
Candidus imperti—si non, his utere mecum.

HOR.

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OBSERVATIONS  
ON  
HYDROCEPHALUS;  
WITH CASES, &c.

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WATER in the head has always been considered an incurable and hopeless disease; one of those over which we have no controul, classed with a few others under an ignoble title, and set down as an *opprobrium medicorum*. If I can in any degree remove this, and shew some chance of a successful issue in these deplorable cases, I shall consider myself amply rewarded for the labour and attention I have paid to them.

It is a question now among Pathologists, whether Hydrocephalus has ever been seen as an Idiopathic disease; that is, whether it exists *per se* independent of any other derangement of structure, or is one link of a chain of causes and

effects which obtrudes itself more apparently on our senses than any other. From my own experience I am inclined to the latter opinion. Dr. Abercrombie, of Edinboro, has related two cases (the only ones he acknowledges he has ever seen), which appeared to him to answer the description of an Idiopathic disease. After relating several cases of acute Hydrocephalus with primary inflammatory symptoms, he says—"As a contrast to these cases, I shall add two examples of Hydrocephalus which presented, simply, serous effusion in the ventricles, without any other morbid appearance in the brain, and with regard to these two cases, I think it right to add that they are the only examples of this kind which I find among my notes of cases of Idiopathic Hydrocephalus."

He places his dependence not altogether on the symptoms, (which were undoubtedly milder and more ambiguous in their course, although as quick in their progress to a fatal result,) but on the appearances after death. Every Pathologist is aware of the uncertainty of a *post mortem* examination, more especially of the brain; and although in these cases no other morbid appearance was found in the brain than an accumulation of water, yet we are not from this to conclude that they were pure cases of Idiopathic Hydrocephalus.

A morbid state of the vessels of the brain, in all probability inflammatory, must have preceded and produced this accumulation of water, just to such a degree as to leave no traces on the dead animal matter.

The symptoms, I consider, amount to little in support of the inference; for although here no traces of inflammatory action could be found, yet on the other hand traces of high inflammatory action have been found after death, when no symptom had appeared in the living subject to expect any such evidence of disease. In these two cases of Dr. Abercrombie's, perhaps we may say, the previous inflammatory state of the vessels was relieved by their unloading themselves—too suddenly for the delicate texture of the brain—of a redundancy of serum, and, before death, to have assumed their natural size and appearance.

Dr. Yeats goes still further, and attributes the primary cause of every case of Hydrocephalus to functionary disorder of the *primæ viæ*, or digestive organs. This may be, and certainly is so in a majority of cases; and it behoves parents to be careful and attentive to every observable derangement, however slight, of these organs in children, more particularly in those belonging to a family liable to it.

Blows on the head, and other accidents, have been known to produce a fatal accumulation of water in the head, in children so predisposed, and that, where the immediate and progressive symptoms have been so slight as to deceive both parents and surgeon.

### CASE.

The son of a gentleman, who had lost two children from water in the head, fell from a high stool, and struck his head violently on the ground. After this he occasionally complained of head-ache, but took scarcely any notice of it; neither did it prevent his usual recreations, nor was the health otherwise affected until five weeks after the accident, when he complained of sickness; the head-ache was much increased, with vomiting, and a pulse of 130. After the bowels had been copiously evacuated, the vomiting ceased, but more alarming symptoms succeeded—delirium, followed by coma from which nothing could rouse him; and Death closed the scene eight days from the first increase of symptoms. Upon examination after death, the ventricles were found distended with water.

The premonitory symptoms, and usual slow and insidious course of the disease, sufficiently shew the nature of the derangement and its inflammatory tendency, of which, unless stayed in



its progress, effusion is the natural consequence, which, from the firmness and unyielding nature of the skull, produces, by compression on the brain, that train of symptoms which quickly leads to dissolution. The vessels, as I have said before, having been unloaded of their superabundant contents—where length of time will permit—return to their natural state, and, as in many cases of *post mortem* examinations, leave no observable traces of diseased action.

If, from the age of the child, or any other cause, imperfect ossification has gone on, and the bones of the skull are not yet united, but yielding, the head, at this stage of the disease, becomes enlarged, the parietes yield in proportion to the accumulation of water within, and the more decided symptoms of compression, with its fatal consequences, are not produced, and for a time the patient's life is saved; but with the same disease under another form, which has been considered not a whit less intractable or fatal, under the name of Chronic Hydrocephalus.

### CASE.

An infant, six weeks old, of a fragile and unhealthy appearance, was suddenly taken with slight convulsions, followed by restlessness and rolling of the head from side to side, frequent sickness, and refusal of its usual food; there

was diarrhoea, with green and unnatural evacuations, sudden screamings, some heat of skin, and a quickened pulse, without any more alarming symptoms. This state continued ten days, at which time an alleviation of symptoms appeared to take place from the means employed, but soon after the head was observed to increase in size, and gradually assumed the appearance related in Case 4, which is a continuation of the same.

This is the only instance in which I have had an opportunity of seeing the whole course of the disease. Dr. Löwenhardt's Case, related at the end, is another, where at a much later period of life, on effusion taking place, the bones yielded to the pressure, and the life of the patient was continued, much to the surprise of the physicians.

I have but little doubt that all these Cases arise precisely in this way; but that, from the tender age of the child, the generally unhealthy state of the patient, and the comparative mildness of the early symptoms, they are overlooked until effusion commences, the bones separate, and the head begins actually to enlarge. Inflammatory action has now ceased, and the opposite or a state of weakness and relaxation commenced, the bones are loose and floating, and the whole head a relaxed and shapeless mass. This state of the disease surely requires a very different treatment



and a wholly opposite style of management, yet we have hitherto seen no distinction made by practitioners.

The active remedies usually administered in this disease, I must deprecate altogether, as most likely—if not to increase the malady—to endanger the life of the patient; the constitution is too much shattered, and the vital powers too weak to bear the rattle of any course of Medicine of this description, and, I think I may say, without much fear of contradiction, that no cure was ever effected by these means, but death in most instances has been hastened, and the little sufferer released sooner, perhaps, than it otherwise would have been, had the disease been allowed to run its natural course. Looking at it in this light, the old plan certainly has its advantages—I have seen several cases treated in this way, when I have felt convinced death has been caused rather by the remedies administered than the disease.

The real skill of the Physician consists not in baffling nature by useless activity, but, by watching her movements and assisting her where she appears to require it. Dr. Blundel says “A meddlesome Midwifery is bad.” A meddlesome Physician is worse. I speak here of course in a general sense, not intending to throw any censure on a useful and talented part of our Profession.

The first idea which led me to adopt the peculiar plan of treatment which shall be detailed, was from observing some adults with heads of such a size as could have been caused by no other than Hydrocephalus in infancy.

It occurred to me at once that, although we possessed no cure for the disease, nature, amidst her curious arcana, did ; and upon enquiring minutely into the history of some of these Cases—and one particularly in the progress of cure—I found that it was nothing more nor less than a comparatively early union of the bones of the head, thereby forming a natural and most efficient bandage, commencing the process of compression, which I, by artificial means, propose and justify by the result of the following cases.

The case in the progress of cure which I accidentally met with—being under the care of another Surgeon—was particularly interesting. The poor mother was delighted, as she expressed it, to have found at last a Surgeon under whose treatment her child had made such advances towards recovery. Upon further enquiry, I found the disease had begun when the child was about three months' old, by a sensible enlargement of the head, followed by the usual symptoms.

She had consulted several medical men, all of

whom, until the last, had given the case up as hopeless. I was astonished at the vast amendment, and, unwilling to attribute it to the means employed, I examined the head more attentively, when I found that the bones were uniting and the head getting firm, which change, I was informed, had taken place only since the attendance of the last Surgeon. Here then, I said to myself, is nature doing her own work in spite of the interruptions of art. I must do the Surgeon the credit to say that he had somewhat relaxed in the measures of his predecessors, and allowed nature some chance of pushing by him in her course.

The principle on which I propose to act in these cases is, to render that support to the parietes of the head which seems to be altogether wanting, and which nature evidently points out as the only remedial measure with any chance of success.

The process is detailed in the first case.

### CASE I.

A child, about a year and a half old, was born to all appearance perfectly healthy, and continued so until six months old, when the head was first observed to increase in size. I did not see it until the disease was so far

advanced that I almost despaired of its terminating favourably. The head was exceedingly large, weighing, I should think, nearly as much as two thirds of the rest of the body, and measuring in circumference twenty-two inches and a half. The child lay in a state of stupor, and was unable in the least degree to move its head. There was slight strabismus and a rolling of the eyeballs, and almost constant startings of the muscles of the whole body, but more particularly of the face. The countenance had a cadaverous appearance, and the skin was of a yellowish colour. The eyes were sunk in their sockets, and enclosed in a dark ring. The flesh was flabby and seemingly hanging on the bones. The evacuations from the bowels were particularly unhealthy, sometimes green, sometimes blackish, but never of a healthy colour, nor indeed had they been healthy since half a year after its birth. The tongue was constantly covered with a thick white coat; when its head was moved it screamed, and seemed sensible of pain. I expected the child would survive but a few days. I therefore communicated my opinion to the parents, and told them the only chance I saw of saving their child was a plan which I shall describe, and which they readily assented to. I should say that it had been taking purgatives and mercurials without benefit before I saw it. I directed the head to be shaved perfectly clean, I then applied

strips of adhesive plaster, about three quarters of an inch wide, completely round the head from before backwards, and so that the ends overlapped each other two inches behind, and covering the space from the eyebrows to where the hair commences, and as low down as the ears would permit ; then, with cross strips, from one side to the other, over the crown of the head ; and, lastly, one long strip, reaching from the forehead within half an inch of the root of the nose over the crown of the head, likewise to the nape of the neck. This gave effectual support to the parietes of the cranium. I ordered the whole head to be kept constantly covered with linen dipped in cold water, and that the child should take no other medicine than a little castor oil, should the bowels require it. Having thus decided on my practice, I patiently waited the result. Its good effects were evident ; in less than a week the little patient could move its head much better, the squinting had disappeared, the secretions from the bowels were more healthy and the startings of the muscles were less frequent. He had not screamed on rolling or moving the head since the bandage was applied. In a fortnight, the size of the head was reduced in circumference three quarters of an inch ; the child was more lively and began to take notice of the persons around it ; the secretions from the bowels were perfectly healthy and evacuated



regularly ; the tongue nearly clean, and the skin of a natural colour ; the countenance more composed and animated.

Two months after the bandage was first applied, the Child appeared in every respect healthy, but the head was still larger than it ought to be—measuring twenty inches and rather more in circumference ; the flesh was firm, and the skin of a healthy mottled hue. The bandage was worn about two months longer, having been renewed about once a fortnight. The bones were then united, and the head firm, and the child well, only requiring time to bring its muscles into action which had been so long quiescent.

This case was published in the Medical Repository for October, 1823. The cold water application appeared to be of little benefit, and tended to loosen the plasters ; I have therefore omitted it in every subsequent case.

## CASE II.

J. W., a child, ten months old, who, according to the account received from the parents, was born perfectly healthy, and remained so for a month, when it appeared to fall into a sickly and unhealthy state, as they supposed from dry nursing, the mother being unable to suckle it.



Two Medical Men in succession had been consulted, without advantage, and the head I was told had been enlarging for some months. It now measured twenty-one inches in circumference; the fontanelles were quite open and distended, and the bones loose and moveable. The complexion sallow, face bloated, muscles relaxed and flabby; pupils dilated and insensible to light, strabismus and sometimes convulsions.

She lay in a half comatose state, and appeared to be insensible to things passing around her; bowels regular, but excretions unhealthy. I directed the head to be shaved, and then applied the adhesive plaster in the manner described, omitting the application of cold water.

*March 5th*—In a week the general symptoms were improved, secretions from the bowels healthy, and the squinting gone.—Head not decreased in size. Plasters firm. Had taken her food better.

*March 16th*—Has had no convulsions since 2nd; bowels still continue regular, with only one dose of castor oil; countenance much improved and complexion clearer. Begins to take notice of things passing around her.

*April 10th*—Plasters have begun to loosen; they were therefore removed, and fresh applied.

The head was found to have decreased half an inch.

From this time the health of the child regularly progressed, and every bad symptom had left her by the end of the month.

*May 6th*—The child has gained flesh, and the muscles become much firmer. Appetite good, and has generally a healthy appearance. The plasters were again renewed, and the circumference found to have decreased an inch. They were again renewed the beginning of June, and left off the following month, when the child appeared in perfect health, the head measuring eighteen and half inches.

### CASE III.

*January 15th*—Jane Parfitt, a child eight months old, was born with a large head, which has sensibly increased up to the present time. Both the anterior and posterior fontanelles are very open, and the parietes distended. The bones of the skull are thin, moveable, and separated from each other. She is constantly in a recumbent position, from inability to sustain the head upright. Pupils dilated and insensible to light, slight strabismus, occasional convulsions, and great restlessness, sickness, and unnatural secretions from the bowels; appetite good, almost

voracious; face pale and emaciated; an inattention to surrounding objects, amounting almost to coma.

I directed the head to be shaved, and applied the plaster bandage. The circumference of the head is nineteen inches. The compression produced no additional uneasiness, nor any increase of symptoms. Castor oil to be given occasionally if required.

During the first month there was little apparent alteration in the size of the head, or the state of the patient, excepting that the convulsions were thought to be not so frequent, and the evacuations had a more healthy appearance. The castor oil had only been given twice; strapping quite firm.

*March 2nd*—Has had no convulsions for a fortnight; strabismus gone, evacuations natural and regular; head appears to be gradually getting firmer; expression of the face much more pleasant and healthy; sleeps well.

*March 15th*—The plaster was renewed as it had become corrugated in several places; the long strip from the forehead to the occiput was omitted, as from the increased firmness of the head it

appeared to be useless. At this renewal the head was found to have decreased in size half an inch.

The case went on well for six weeks, without one untoward symptom. The child has increased in flesh; the evacuations are natural; the convulsions and restlessness have entirely disappeared; the head is much firmer; the fontanelles are smaller, and the sutures are nearly closed.

*May 3rd*—Strapping renewed; the head by measurement has diminished but little; the child is better able to move it, although the muscles of the neck have not yet sufficient strength to sustain it. Has cut four teeth since the commencement of the treatment.

From this time the little patient gradually improved in health and strength. The plasters were again renewed for the last time about the latter end of July. The child was now able to hold up its head with but little oscillation. In September it appeared in perfect health, with a head rather larger than common—measuring about eighteen inches in circumference—but quite firm in every part, excepting a small portion of the anterior fontanelle. I saw the child twelve months after, when it seemed, in every respect, to be well. At this time the parents left Bath, and I have not seen it since.

## CASE IV.

Is a continuation of that related in a former page. At six months old I decided on submitting it to the process of compression—the head measuring nineteen inches and a half in circumference. The fontanelles were much open, and distended with fluid; the bones loose and moveable. The child was perfectly unable to sustain its head, and lay constantly in a recumbent posture; the countenance bloated and indicating distress; pupils dilated and insensible to light; strabismus, restlessness, and occasional convulsions; skin dry and harsh, and urine scanty; bowels rather costive.

The head was shaved, and the plasters applied on the First of June.

*June 15th*—There is a marked improvement in the state of the child; he was much quieter, and the strabismus had disappeared; the pupils contracted a little on the admission of light; countenance better; plasters firm.

*July 2nd*—Have had some trouble in keeping the bowels open with castor oil, but the child in every respect is better; the countenance with rather a comfortable expression; skin soft; and urine passed in a natural quantity. The plasters were renewed, and the head found to be reduced in size full half an inch.



*July 24th*—The plasters again renewed. The child continues improving; the face has now a natural and pleasant expression, and every symptom of anasarca gone; bowels more regular, and requiring castor oil only about once a week. After this the plasters were twice renewed, and the patient gradually improved, both in health and strength, until the beginning of October, when he was attacked with Meazles, which, however, he passed through favourably; and in the beginning of December appeared to be in perfect health, with the head reduced to eighteen inches, and quite firm, except the anterior fontanelle, which was still partially open.

#### CASE V.

A child, twelve months old, whose head was observed to have been increasing in size for the previous four months, now measured in circumference nineteen inches; the fontanelles and sutures were much open, but the parietes were not particularly distended, although fluid could be distinctly felt; the whole head was loose and flabby, and the bones as it were floating; the countenance shrunk and pallid, and the body generally much emaciated; pupils dilated and one eye-lid dropped, which the patient seemed perfectly unable to lift; slight convulsions occasionally; but usually it lay in a quiet, sleepy state; took its food rather voraciously; the bowels



irregular, sometimes loose and sometimes costive, but the excretions always unhealthy. It had been attended by three separate medical gentlemen, who had given up the case as hopeless.

The head was shaved, and the adhesive bandage applied on the 10th of March; and, although compression was carried to a much greater extent than I had ventured on in any other case, no untoward symptom followed.

For three months no particular change in the state of the child took place; at this time, June the 10th, although the plasters were still firm, I thought it well, from the growth of the hair and other circumstances, to renew them, which accordingly I did. The bowels were still irregular, requiring occasionally a dose of castor oil, which answered the purpose exceedingly well, and no other medicine was given; the appetite still continued good; the food consisted of bread and milk and arrow-root.

*July 15th*—The plasters again renewed; no particular change in the state of the patient. The head appeared rather firmer, but no alteration in size; the bowels more regular, and evacuations somewhat improved. Diet ordered to be altered to beef-tea and jellies.

*Sept. 5th*—Both eyelids in perfect action ; no convulsions ; bowels regular, and evacuations healthy ; countenance expressive of ease and comfort ; can sit up with little assistance, and appears lively ; head much firmer, and reduced in size half an inch ; gains flesh.

*Oct. 29th*—The head is firm and the sutures quite closed ; the child begins to walk about, as yet rather staggering. Plasters left off. The child continued to progress, and in three months was restored to perfect health.

#### CASE VI.

A child, three months old, was born with rather a large head, which had increased gradually up to this time, and measured seventeen inches. The symptoms were similar to the former cases, with the exception of squinting, and no dropping of the eyelid. The head was shaved, and the plasters applied on the 15th of August. In two months the condition of the child was much improved ; the head firmer ; no convulsions ; bowels regular, and evacuations healthy. The plasters were re-applied twice in the course of the following three months, and no untoward symptom had presented itself. By the end of January, the child appeared perfectly recovered ; the sutures had quite closed, and the anterior fontanelle nearly ; but, strange to say, the head

had not lessened in size from the commencement. It was suckled through the whole course, and seldom required the castor oil.

It would be useless to multiply cases which are so similar in their symptoms, progress, and cure, but here are sufficient to shew the efficacy of a practice which I have never found to fail.

Dr. Engleman has tried the plan in Germany, and he has published ten Cases, in each of which he was completely successful in removing the disease, and restoring the patient to perfect health.

The following is a copy from the *Lancet* :—

“A German Physician, Dr. Engleman, having lost all his patients affected with this disease under the ordinary modes of treatment, determined on adopting a method recommended by Barnard, which consists in exercising a well regulated pressure on the head, by means of strips of diachylon plaster. Since the year 1834, he has submitted ten children to this mode of treatment, and on each occasion the success exceeded his hopes ; and these Cases seem to leave no doubt on the efficacy of the plan which he advocates. The following is a condensed account of a few of the Cases contained in his Memoir.

## CASE I.

*January, 1834*—A male child, six months old ; two brothers already cut off by Hydrocephalus. The circumference of the skull is  $17\frac{1}{2}$  inches ; the anterior fontanelle is more than an inch across ; all the sutures are separated from one another, and the bones of the skull are thin. The head of the infant vacillates and inclines backwards ; it is unable to sustain it ; the face is pale ; the pupils dilated. On the 10th of January the head was shaved and moderately compressed with strips of adhesive plaster, which did not produce any apparent uneasiness or accident. No effect followed during the first month ; the bandages were re-applied in February ; the head now became gradually more firm ; the expression of the face more marked ; and the sleep more tranquil. About the middle of April the bandages were again re-adjusted, and an important degree of improvement was now manifest ; the size of the head had diminished by half an inch ; the bones had increased considerably in thickness, and the sutures were nearly closed. On the first of June the apparatus was renewed for the third time, and shortly afterwards the cure was complete.

## CASE II.

*May, 1835*—Child one year old ; same symptoms as in the former case ; appetite voracious ; alternations of constipation and diarrhoea ; head  $19\frac{1}{4}$  inches in diameter ; bones thin ; sutures separated from one another ; scalp warm and covered with dilated veins. The bandages of sticking plaster were continued for two months, when a marked improvement in the child's condition was observable. On the 14th of August the circumference of the head had diminished by half an inch, and the sutures were closed. The bandages were re-applied on the 3rd of October. The

child now began to walk about, and was able to sustain his head erect on the neck. The teeth were cut without any accident. In the month of December the cure was completed.

### CASE III.

*Jan.*, 1835—Child nine months of age ; same symptoms as in former cases ; frequent vomiting ; pupils insensible ; great listlessness and apathy ; circumference of head 19 inches ; width of fontanelle  $1\frac{1}{2}$  inches. Apparatus applied, and renewed towards the end of February, when the head seemed much reduced in size. Apparatus re-applied on the 18th of March. Diminution of volume of head half an inch. The apparatus was again renewed on the 15th of May, and 15th of June, at which latter period the child was restored to health ; the fontanelle was now completely closed, and the head measured only eighteen inches in circumference.

It is unnecessary to cite the other seven Cases which are detailed by the Author, the difference in symptoms and the duration of the disease being trifling. In all these Cases the adhesive plaster was applied, and a complete cure obtained within a space of time which never exceeded a year."

Dr. Löwenhardt, of Prenslow, in Prussia, has also related a Case in a German periodical, in which it also proved successful, although *assisted* by some of the usual means resorted to ; which, if not mischievous, were perfectly useless.



The Case is useful and instructive, and I shall, therefore, transcribe it here more particularly, as the relator seems inclined to take to himself the credit of originality.

### TRANSLATION.

A Girl, two years and a quarter old, of a pale and bloated appearance, about nine months ago fell from the arms of her nurse to the ground, since which time she has been constantly ailing, lost her cheerfulness and appetite, bowels became constipated and could scarcely walk, or, in other words, was unwilling to walk. The Medical Man considered the disease to be in the stomach, and ordered an emetic, which operated unusually strong without producing relief; but since that time vomiting often occurred, particularly after eating, which was treated without success with various remedies. A second Medical Man was now called in, who acknowledged the nature of the complaint, and employed the most effective remedies, as leeches, cold applications, calomel, digitalis, &c., but was not more successful after five months treatment; so that the parents, quite despairing of the recovery of their child, abandoned all medicine: but, as the child did not die, they again applied for medical aid. On the 23d December, 1832, the Author was called in, who found the following appearances:—The child was in bed, very restless, constantly holding her head with her right hand, or picking her lips, whilst the left hand lay quietly beside her; the body was emaciated, the skin wrinkled, and, in many places covered with a small eruption; the feet, œdematous, and also the face, particularly around the



eyes, cheeks somewhat puffed; the expansion of the head was particularly striking, the bones separated from each other, and its circumference measured 23 inches, 9 lines.

The eyes lay deep in the orbits, were staring and squinting, or rolling around, and had an immoveable dilated pupil, the conjunctiva somewhat red in the corner; the respiration was unequal, and oftentimes sighing; the pulse slow, small, and intermitting, her only nutriment was milk, which was, however, often rejected; the bowels were kept open by injections. The mind had also suffered, she appeared not to know her mother, and her language consisted of unintelligible sounds.

Under these circumstances, as no very favourable issue could be expected, and as the usual means had been used without success, the Author believed to be able to enter upon a particular treatment, and compression was now tried, which was so managed—after the shaving off the hair, that three strips of sticking plaister, of a finger's breadth each, which covered the space from the eyebrows to the hair, in such a manner were laid firm round the head that the ends overlapped for many inches, and a stream of cold water was conducted to the head by means of a little cup four times a day; a perpetual blister was placed on the nape of the neck and mercurial ointment rubbed in the neck and upper and lower extremities. Internally, calomel and digitalis. The strips of plaster becoming loosened by the restlessness of the child, and the application of cold water, were renewed every three days.

After sixteen days the state was remarkably improved, the

child became more quiet, vomiting less, the pupils less dilated, and acting more readily, the pulse more frequent and full, urine increased in quantity, and the circumference of the head diminished eight lines. In order to avoid the above mentioned inconveniences, the Author now laid around the head of the child a simple bandage, which consisted of a padded but firm bandage, two inches broad, surrounding the head and fastened by means of buckles, and two smaller ones, which crossed over the crown of the head and fastened to the first; the cold applications were left off on account of the bandage, and the gums becoming affected the mercurial remedies were omitted. On the Twentieth of January the head was diminished three quarters of an inch. On the Eighth of February the bones nearly closed; on the Twenty-seventh the head had a natural appearance, the bones were united, and the circumference measured 19 inches 7 lines.

This is a well-marked case, and one in which the whole course of the disease is seen. The preliminary symptoms only appear to have been observed by the two first Physicians, and the stage of chronic disease had set in when seen by Dr. Löwenhardt, who has partially fallen into the usual error of treating every stage of the disease in the same way. No doubt during the interval of medical attendance effusion had taken place, the sutures had separated, the bony parietes of the head had yielded to the internal pressure, and the case had become one of pure dropsy of

the brain, well adapted for the treatment here laid down.

Dr. Conquest has adopted a plan of treatment which, under his management, has been only partially successful: part of this certainly has the merit of originality, but the whole is nothing more than an extension of my own. In addition to compression with adhesive plaster, he taps the head with a Trocar, and allows the water to ooze out. It is an unusual operation and one likely to produce some noise in the world; but the merit of an operation consists not in its singularity but in its necessity and efficiency, and the question naturally arises is there any necessity for it? All my cases, and Dr. Engleman's too, shew there is none; therefore there can be no efficiency, and consequently this brilliant operation is worse than useless. The only way in which, by possibility, it can be useful, would be in a further diminution of the size of the head in the progress of cure, and this it does not appear to have done in any of Dr. Conquest's cases. One particularly marked case where twelve ounces of fluid were taken from it at a second operation, and as much, I suppose, at the first, for he does not specify the quantity—"it is a curious fact that "the head, which was enormously large at the "time of the operation, remained stationary, "although the size and strength of the body had

“gradually increased in proportion to the age of  
“the boy ; and now, that nearly eight years have  
“elapsed, the head, although now dispropor-  
“tionately large, remains at about the same  
“dimensions.”

Then why submit the patient to a formidable  
and unnecessary operation ?

FINIS.



